

July 2015

## Jackson County

### Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

A total of 14 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Jackson County economy.<sup>1</sup> These 14 sectors have a total direct output of approximately \$223 million and support 1,312.1 jobs in Jackson County. Running the model for all 14 sectors simultaneously produces the following results:

**Agriculture Contribution in Jackson County**

Impact Type <sup>2</sup>	Employment	% of Total Employment	Total Value Added <sup>3</sup>	% of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>	% of Gross Regional Product
Direct Effect	1,312.1	14%	\$63,605,017	13%	\$222,944,892	47%
Indirect Effect	167.0	2%	\$8,701,650	2%	\$20,575,816	4%
Induced Effect	123.4	1%	\$7,785,947	2%	\$14,381,759	3%
Total Effect	1,602.5	17%	\$80,092,614	17%	\$257,902,467	55%

As shown in the above table, agriculture, food, and food processing supports 1,602.5 jobs, or 17% of the entire workforce in the county. These industries provide a total economic contribution of approximately \$258 million, roughly 55% of Gross Region Product (GRP). As noted below in the calculation of Gross Regional Product, imports and institutional sales are subtracted. Therefore, counties that import a relatively large amount of goods and services will have a reduced GRP which may lead to agricultural output being greater than GRP.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 14 agriculture, food, and food processing sectors is approximately \$80 million, or 17% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 17% of the total economy.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting:  
[https://implan.com/index.php?option=com\\_content&view=category&id=19](https://implan.com/index.php?option=com_content&view=category&id=19)

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value Added = Labor Income + Indirect Business Taxes + Other Property Type Income.

<sup>4</sup> GRP = Final Demand of Households + Governments Expenditures + Capital + Exports - Imports - Institutional Sales

<sup>5</sup> Output = Intermediate Inputs + Value Added

In the top ten by employment, Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming is the top employer in the agriculture industry with 440.4 employees. This table also shows the amount of jobs that are created by the agriculture industry in Jackson County.

#### Top 10 Industries Affected by Employment

Sector Description:	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming .....	440.4	\$45,753,728
All other crop farming.....	343.2	\$17,458,727
Animal, except poultry, slaughtering.....	198.0	\$120,921,924
Veterinary services .....	83.7	\$3,976,718
Landscape and horticultural services .....	80.8	\$3,575,249
Grain farming .....	67.0	\$9,407,732
Truck transportation.....	51.3	\$6,635,338
Dairy cattle and milk production.....	39.6	\$2,955,956
Real estate.....	19.5	\$2,924,035
Wholesale trade.....	18.1	\$3,285,795

The Animal, except poultry, slaughtering industry directly contributes approximately \$121 million to Jackson County's economy. This table also shows how much revenue is generated in other industries by having a strong agriculture industry.

#### Top 10 Industries Affected by Output

Sector Description	Total Employment	Total Output
Animal, except poultry, slaughtering.....	198.0	\$120,921,924
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming .....	440.4	\$45,753,728
All other crop farming.....	343.2	\$17,458,727
Oilseed farming .....	16.5	\$14,300,333
Grain farming .....	67.0	\$9,407,732
Truck transportation.....	51.3	\$6,635,338
Veterinary services .....	83.7	\$3,976,718
Other local government enterprises.....	14.5	\$3,887,893
Landscape and horticultural services .....	80.8	\$3,575,249
Wholesale trade. ....	18.1	\$3,285,795

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture sector and the output they contributed to Jackson County's economy.

[illegible]

All 105 counties in Kansas have IMPLAN models and agriculture contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Kansas, the retail sector was omitted.